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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/591,728

Applicant(s)

MANDT ET AL.

Examiner

Lucas Stelling

Art Unit

1797

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2006 and 17 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 12-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date See Continuation Sheet
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :9-1-06, 3-27-07, 1-22-08, 3-17-09.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of group 1 claims 1-11 in the reply filed on 3-17-09 is acknowledged. The traversal is on the ground(s) that the groups are related as combination/subcombination and that the combination requires all the particulars of the subcombination. This is not found persuasive because the instant application is a national stage application filed under 35 USC 371. Restrictions in 371 national stage applications are not analyzed under U.S. restriction practice (See MPEP 800), but instead use the unity of invention standard employed for PCT applications. See MPEP 1893.03(d). Under the unity of invention standard the examiner must determine whether there is a special technical feature of the invention which is shared by each group of claims, in other words, a common special technical feature. The expression special feature is defined as meaning those technical features that define the contribution, which each claimed invention, considered as a whole, makes over the prior art. In this case, the common technical feature between both groups of claims are the limitations of claim 1, which limitations were found in U.S. Patent Application Publication No. 2002/0195384 to Rohrbach; therefore the common technical features between the groups of claims are not special, and the groups lack unity of invention. Applicant may be entitled to rejoinder if, and when, a claim directed to the invention of the first group is found to be allowable and the claims of the second group are amended to depend from or otherwise require all limitations of the claim in the first group. Accordingly, claims 12-17 are withdrawn from consideration.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what the term "potted" means in describing the relationship and configuration of the filter media and the cover of the treatment agent storage container. For purposes of examination the term will be interpreted as adjacent.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Application Publication No. 2002/0195384 to Rohrbach et al. ("Rohrbach").
6. As to claim 1, Rohrbach teaches a service cartridge for positioning in a filter housing; the service cartridge comprising:

filter media **(315)** having a first and second ends **(A and B)** and positioned around a central opening area;

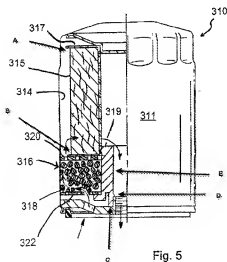
a first end cap **(part of the frame 317 constitutes an end cap of the filter)** secured to the first end of the filter media; and ,

a treatment agent storage and release cartridge **(the cartridge is defined by the upper plate 320, the lower plate 322, the sealing member 319 and the wall of the filter housing, see also [0055], [0056], and [0057])** to the second end of the media;

the treatment agent storage and release cartridge having a ring configuration **(the filter is cylindrical)** defining an inside wall (E) defining a central flow conduit in liquid flow communication with the central open area defined by the filter media;

the inside wall having no diffusion apertures **(diffusion apertures are on the top and bottom plate but not through the inside wall)** therethrough; and

a housing seal arrangement **(see C and D)**.



7. As to claim 2, Rohrbach shows a service cartridge where the cartridge inside wall seals to the housing in a radial configuration **(See C and D above)**.

8. As to claim 3, Rohrbach shows a cartridge where the diffusion apertures arrangements are on an upstream side of the seal (**See 322**).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rohrbach in view of U.S. Patent No. 4,144,169 to Grueschow ("Grueschow").

13. As to claim 4, Rohrbach teaches the filter cartridge of claim 3, but the agent storage and release cartridge is formed from separate tops and bottoms, inner wall and the housing wall, rather than in a cup with a cover. Essentially, integrally forming the bottom plate, the inner wall, and providing an outer wall to contain the additive, while leaving the top plate separate as a cover, in Rohrbach meets the further limitations of claim 4. The use of an integral additive container is shown for example in Grueschow **(See Grueschow in the Figures, 84 and 86 produce a cup for holding the additive).**

It is known to those skilled in the art to provide for an integral cup formation with a cap in order to allow for separate modular preassembly of the additive container, when constructing a filter. See also MPEP 2144.04 (V)(B), *it is obvious to make parts found in the prior art integral, unless there is a showing of contrary understanding or unexpected results*. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention to construct the treatment container in Rohrbach as a cup with a cap to allow for modular preassembly of the additive container, or else as simple a matter of design choice.

14. As to potting the filter media against the cover, the filter media is adjacent the treatment compartment in Rohrbach, and it is within the skill of a person to do this in order to keep the cover top cover in place.

15. Claims 5-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rohrbach as modified by Grueschow as applied to claim 4 above, and further in view of U.S. Patent No. 6,488,845 to Neufeld et al. ("Neufeld").

16. As to claim 5, Rohrbach as modified by Grueschow teaches the filter cartridge of claim 4, but does not teach the use of a mounting prong arrangement. The use of mounting prongs are shown, for example, in Neufeld (**See Figs. 2 and 5, 54 is a finger for engagement with flared surface on the engagement plug 60, which thereby secure the filter in the housing; see also col. 4 lines 27-50**). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention to provide a mounting prong arrangement projecting axially from the end cap in order to engage with a feature on the housing, thereby securing the filter element.

17. As to claim 6, Rohrbach as modified by Grueschow and Neufeld teach the filter cartridge of claim 5, and Rohrbach depicts using a pleated media (**See [0055]**).

18. As to claim 7, Rohrbach as modified by Grueschow and Neufeld teach the filter cartridge of claim 6, and Rohrbach teaches that support screens are optional (**Rohrbach [0055]**), and it would be obvious to omit a screen for support if the filter were self supporting. See MPEP 21144.04(II)(A), *omission of an element and its function is obvious if the function of the element is not desired/needed*. Therefore, it would have been obvious to a person of ordinary skill in the art to omit the cylindrical support screen.

19. As to claims 8-10, Rohrbach as modified by Grueschow and Neufeld teach the filter cartridge of claim 7, and the axial length ratio is a result effective variable which

controls the amount of treatment agent which will be carried by the filter, and the amount of treatment agent which may be exposed to the oil, thereby affecting the life of the additive and/or also the rate of delivery. *Discovery of the optimum value of result effective variable in known process is ordinarily within the skill in the art and would have been obvious, consult In re Boesch and Slaney (205 USPQ 215 (CCPA 1980)).*

Furthermore changes in size and proportion have been held obvious absent an unobvious change in operation of the device. See MPEP 21144.04(IV)(A).

20. As to claim 11, Rohrbach teaches the device of claim 10, and the first end cap covers the end of the filter and does not allow liquid to enter the media from the end side, nor does it allow liquid to bypass the filter and pass downstream. The first end cap therefore is closed (**See Rohrbach Fig. 5**).

Double Patenting

21. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

22. Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. U.S. Patent No. 7,160,451. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of '451 claims a service cartridge (**col. 14 line 65 and col. 15 lines 5, filter and treatment agent storage cartridge**) for positioning in a filter housing (**col. 14 line 61**); the service cartridge comprising:

filter media (**col. 14 line 66**) having a first and second ends (**col. 14 line 67, first end second end caps inherently cover first and second ends**) and positioned around a central open area (**col. 15 line 1**);

a first end cap secured to the first end of the filter media (**col. 14 line 67**); and
a treatment agent storage and release cartridge (**col. 15 lines 5-6**) secured to the second end of the media (**col. 15 lines 6-8, cartridge is positioned between end of filter and the top plate**);

the treatment agent storage and release cartridge having a ring configuration (**col. 15 line 14**) defining an inside wall (**col. 15 line 12**) defining a central flow conduit (**col. 15 line 13**) in liquid flow communication with the central open area defined by the filter media (**col. 15 lines 16-18**);

the inside wall having no diffusion apertures therethrough (**col. 15 line 19-20**); and
a housing seal arrangement (**col. 15 lines 16-29**).

23. Because the examined claim is anticipated by the reference claim, a 103, *Graham* analysis is not required for this rejection. Essentially, the claim examined, as currently written, claims a subcombination found in the '451 patent claim 1, and the combination claimed in the '451 requires all the particularities of the instantly claimed subcombination. Therefore a patent to the subcombination would, necessarily, extend the rights to the combination should the subcombination issue as a patent after the combination.

24. Claims 1, 2, and 3 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 2, 7, and 12 of U.S. Patent No. 7,238,285 in view of U.S. Patent Application No. 2002/0195384 to Rohrbach ("Rohrbach"). Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 2, as it depends from and therefore requires all limitations of claim 1, of '285 claims a service cartridge (**col. 15 lines 4-6 filter and treatment agent storage cartridge**) for positioning in a filter housing (**col. 15 line 3**); the service cartridge comprising:

filter media (**col. 15 line 4**) ;

a treatment agent storage and release cartridge (**col. 15 lines 11-12**) secured to the second end of the media (**col. 15 lines 45-48, cartridge is positioned between end of filter and the top plate**);

the treatment agent storage and release cartridge defining an inside wall (**col. 15 lines 23-25**) defining a central flow conduit (**col. 15 line 23-24**);

the inside wall having no diffusion apertures therethrough (**col. 15 lines 23-24**); and

a housing seal arrangement (**col. 15 lines 40-43**).

25. Instant claim 1 is different from claim 2 as it depends from claim 1 of the '285 patent in that the specific configuration of the filter cartridge having a filter media having a first and second end caps and having a central opening for liquid flow communication, as well as the treatment agent storage cartridge being ring shaped, are not claimed. However, a filter media such as this is shown in Rohrbach (**See Fig. 5 of Rohrbach filter has media with first and second ends and inner flow channel**), and this configuration is known to those skilled in the art to allow for a stable filter element because the caps hold it in position, with even flow distribution across its length because the central opening causes an even media distribution along the filter length. As to the use of a ring shaped this is also shown in Rohrbach (**See Fig. 5**), the use of a ring configuration is known to those skilled in the art as it allows for even additive distribution in a cylindrically configured cylinder. Therefore, it would have been obvious to a person of ordinary skill in the art to conclude that claim 2 of the '285 would cover the subject matter instantly claimed because cylindrical filter media allow for even distribution of liquid, and a stable media and the use of a ring shaped storage cartridge allows for even additive distribution in a cylindrical filter.
26. As to instant claim 2, '285 claim 2 claims a gasket between the additive cartridge and the top late of the housing (**'451 col. 15 lines 40-45**).

27. As to instant claim 3, '285 claim 2 claims diffusion apertures on the upstream side of the filter (**'451 col. 15 lines 10-15**).

28. As to instant claim 1, '285 claim 7 claims a service cartridge (**col. 16 lines 11-12**) for positioning in a filter housing (**col. 16 line 12**); the service cartridge comprising:

filter media (**col. 16 line 13**) having a first and second ends and positioned around a central open area (**col. 16 line 13-14**);

a treatment agent storage and release cartridge (**col. 16 lines 15**) secured to the second end of the media (**col. 16 lines 15-16**);

the treatment agent storage and release cartridge defining an inside wall (**col. 16 lines 27**) defining a central flow conduit (**col. 16 line 34**) in liquid flow communication with the central open area defined by the filter media;

29. the inside wall having no diffusion apertures therethrough (**col. 16 lines 34**).

30. Instant claim 1 is different from '285 claim 7 in that an end cap of the filter media, a ring configuration of the agent storage container, and a seal arrangement are not claimed. However, Rohrbach teaches the use of an end cap (**See Fig. 5 317 has a portion covering the end of the filter**), a ring configuration (**See Fig. 5 the agent storage compartment is shaped line an annular ring**), and a seal arrangement is shown for dividing the upstream and downstream flow and connecting the filter cartridge to the housing (**See Fig. 5 319 provides a seal**). The use an end cap is known to those skilled in the art to provide for a stable filter media, and the use of a ring configuration for additive storage provides even additive distribution. Therefore, it would

have been obvious to a person of ordinary skill in the art at the time of invention that '285 claim 7 would cover the subject matter instantly claimed because end caps provide stability for the media, the ring configuration provides an even distribution of additive in the flow, and the seal arrangement divides the upstream and downstream flow and attaches the filter cartridge to the housing.

31. As to claim instant claim 1, '285 claim 12 claims a service cartridge (**col. 16 lines 66**) for positioning in a filter housing (**col. 16 line 66-67**); the service cartridge comprising:

filter media (**col. 17 line 1**) having a first and second ends and positioned around a central open area (**col. 17 lines 1-2**);

a treatment agent storage and release cartridge (**col. 17 lines 3**) secured to the second end of the media (**col. 17 lines 3-4**);

the treatment agent storage and release cartridge defining an inside wall (**col. 17 lines 17**) defining a central flow conduit (**col. 17 line 17**) in liquid flow communication with the central open area defined by the filter media;

32. the inside wall having no diffusion apertures therethrough (**col. 17 lines 17-18**).

33. Instant claim 1 is different from '285 claim 7 in that an end cap of the filter media, a ring configuration of the agent storage container, and a seal arrangement are not claimed. However, Rohrbach teaches the use of an end cap (**See Fig. 5 317 has a portion covering the end of the filter**), a ring configuration (**See Fig. 5 the agent storage compartment is shaped like an annular ring**), and a seal arrangement is

shown for dividing the upstream and downstream flow and connecting the filter cartridge to the housing (**See Fig. 5 319 provides a seal**). The use an end cap is known to those skilled in the art to provide for a stable filter media, and the use of a ring configuration for additive storage provides even additive distribution. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention that '285 claim 7 would cover the subject matter instantly claimed because end caps provide stability for the media, the ring configuration provides an even distribution of additive in the flow, and the seal arrangement divides the upstream and downstream flow and attaches the filter cartridge to the housing.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lucas Stelling whose telephone number is (571)270-3725. The examiner can normally be reached on Monday through Thursday 12:00PM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

las 3-27-09

/Matthew O Savage/
Primary Examiner, Art Unit 1797